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ABSTRACT

Basic skills programs are now almost a given in the curricula of postsecondary institutions; however, the key area of concern of basic skills researchers is, Are they working? The answer is two fold: yes, those involved in and committed to the programs are working very hard, and no, the programs themselves are not working very well. There is a dearth of empirically based evaluation research on the programs. The following are important in the discussion of basic skills programs: a historical perspective of governmental and institutional policies that have been challenged by the need for basic skills programs; the nature of the student who enters a program; a generalized description and definition of basic skills programs; and the conclusion drawn by some researchers that the existing compensatory programs have done very little toward eradicating the academic problems of disadvantaged college students. (MSE)

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Basic Skills Programs: Are They Working?

Mary Kathryn Grant and Daniel R. Hoeber

AAHE-ERIC/Higher Education
Research Report No. 1
1978

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Foreword

Last spring the National Assessment of Educational Progress issued a report that documented what many faculty members have been suggesting for a long time: nearly half of the 17-year-olds cannot read college freshman materials or perform basic mathematics. Also, less than one-third of this age group can calculate the area of a square, given its perimeter, or write unified and focused essays.

For the past decade, conventional wisdom held that only the educationally disadvantaged students going on to higher education as a result of special equal educational opportunity programs lacked these basic skills. This report now gives evidence that the population of students needing training in the basic skills of reading, writing, and mathematics is much larger than anticipated. This condition, along with the concerns raised by the declining CEEB and ACT college entrance test scores, and a concomitant feeling that a college education should contain a core of fundamental courses, has increased the importance of basic skills programs.

Questions now being raised are: How successful are these programs? Can a universally successful pedagogical approach be identified? What can we learn from the failures of these programs? and What is the future outlook for basic skills programs?

Mary Kathryn Grant, associate dean for academic services at Mount St. Mary's College, Los Angeles, California, and Daniel R. Hoeber, coordinator of developmental writing at Mercy College of Detroit are particularly suited to address these questions, since they have been active participants in writing about and teaching basic skills courses. Using their combined scholarship and experience, the authors of this AAHE-ERIC/Higher Education Research Report examine critical areas such as the importance of the student's self-perceptions, program structuring, and how long these courses should be. Throughout their discussion, the authors recommend ways to improve basic skills programs and emphasize the need for more empirical data.

Jonathan D. Fife
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Overview

Basic skills programs are now almost a given in the curricula of postsecondary institutions; however, the key concern of those doing research in the basic skills area is Are they working? The question can be answered in two ways: yes, those involved in and committed to those programs are "working" very hard; no, the programs themselves are not "working" very well, or, more accurately, a dearth of empirically based evaluation research on these programs makes the question moot.

K. Patricia Cross believes that very little of what we do now in education has been validated through research (1976). Such a statement is probably too broad; Edmund Gordon refines Cross' assertion by noting that, despite the proliferation of compensatory programs in postsecondary education, there has been very little validly conducted evaluative research on basic skills programs (1966; 1975; 1976a). A double standard that demands greater accountability from basic skills programs than from traditional educational systems and structures makes the question "Are they working?" even more volatile and understandably vexes those concerned with the generation, development, evaluation, and/or funding of such programs (FIPSE [1976], p. 4).

It is not without significance that within the past year two major national conferences were focused on basic skills programs and, more specifically, on evaluation. The final conference of the Fund for the Improvement of Postsecondary Education's (FIPSE) National Project II, "Alternatives to the Revolving Door," was held in December of 1976. In March 1977, Chicago State University sponsored a similar conference, "Remedial-Developmental Studies in Post-Secondary Institutions." Announcements of regional conferences and dissemination conferences, such as the one sponsored by Operation Hope and funded by the National Institute of Mental Health, peppered the *Chronicle* bulletin board and higher education journals. Clearly the concern is widespread.

Since January, Shaughnessy's *Errors and Expectations* (1977), a handbook for basic writing, as well as numerous articles, studies, and dialogs (Rondinone 1977), have appeared. Roueche and Snow (1977) have recently completed a national study of developmental programs. The search for responsive and effective programs—and data to support these programs—is equally widespread.

Since the focus here is primarily on the evaluation of basic skills programs, we are necessarily concerned with the very nature of these programs. Consequently, the following is considered essential to an understanding of the totality of the basic skills program: an historical perspective of governmental and institutional policies that have been challenged and, in some ways, changed by the need for basic skills programs; the nature of the student who enters this type of program; and a generalized description and definition of basic skills programs derived from a consideration of these programs and their components. Ultimately, however, this report must determine the truth of Kendrick and Thomas' conclusion that existing compensatory programs have done very little toward eradicating the academic problems of disadvantaged college students (1970, p. 171).

Despite the well documented "famine" or "paucity" of information that can withstand scrupulous statistical analysis (Gordon 1967; Crossland 1971; Miller and Gordon 1974; Tinto 1974; Cross 1976), there is a growing body of naturalistic or impressionistic evidence that cannot be dismissed out of hand (Miller and Gordon 1974, pp. 316-317; Tinto 1974). And because there have been two very significant studies of the soundness of the research (sampling procedures, mortality, reliability, validity, etc.) relating to developmental skills programs, we have determined the most useful course of action is to avoid duplicating those studies readily available.

In the absence of hard data to substantiate the success or lack thereof of individual programs, specific studies will not be examined per se. Klingelhofer and Hollander (1973) and Mulka and Sheerin [1974] have more than adequately evaluated specific studies in their reviews of the literature. Moreover, Gordon (1975a) and Cross (1976) have also done extensive analysis of certain components.

Therefore, our aim is to provide an overview of the recent literature in an effort to identify those elements that have some demonstrated potential for success; to survey current trends and specific approaches to remediation; and to advocate areas or activities for further research and for implementation.

Historical Perspectives: The Schools

To initiate this study by examining postsecondary institution programs would be to overlook what many feel is the cause for the existence of basic skills programs in higher education, i. e., the quality of the student's precollege education. Accusing the secondary school systems for the proliferation of poorly prepared college freshmen has become almost a cliché in academic circles; indeed, such fault finding has extended outside these circles, as evidenced by national news magazines devoting almost entire issues to this very problem. In her 1976 study, K. Patricia Cross found that almost half of the college instructors surveyed believed that elementary and secondary schools were to blame for the low achiever's major obstacles in higher education (p. 234). Perhaps even more damaging is the proposition that the high school curriculum is the most critical of all variables that affect a student's access and entrance to as well as his achievement and persistence in postsecondary education (Mulka and Sheerin [1974], p. 149).

Various studies have documented a dropping off in the quality of high school graduates now entering postsecondary education. One report indicates a decline of 10 points in the verbal score and eight in the mathematics score on the ACT in one year, the largest single decrease for any single year since the decline began in 1963 (College Entrance Examination Board 1975). Reports of declines on standardized entrance examinations appear to indicate a decrease in the effectiveness of the present secondary school curriculum; however, there are various interpretations of these disturbing figures and the causes for the significant drop in these scores. Munday feels that the decline in the ACT scores results not so much from a decrease in the number of high-scoring students as from an increase, particularly between 1970 and 1974, in the number of students scoring low in the 1-to-15 standard score. Further, Mundy concludes that his finding is attributable to a larger number of low-ability women planning to attend college (1976). The validity of Mundy's conclusion is questionable, but the fact of the decline is undeniable.

On the surface, then, it does seem that the high school senior today is less well prepared for college than the senior of twenty years ago. This quite common conclusion may be an overextension; what the facts say is merely that today's high school senior does not perform

as well on a standardized college board examination as did seniors in the past. The broadest interpretation of these figures with respect to the quality of precollege education is that the high school senior is not as well prepared to score well on an ACT examination as he was in the past. The validity of these examinations to predict success in college is not the point here, but, rather, what skills a student may have failed to attain during his precollege education that directly affect his being placed in a basic skills program.

Several researchers now conclude that a student poorly trained in basic skills will be a higher risk student than the student who merely performs poorly on an ACT examination. In fact, Mulka and Sheerin posit that a lack of basic skills for successfully achieving the benefits of higher education is a far more critical barrier to educational opportunity than any other single factor ([1974], p. 145). By basic skills, they mean reading, writing, and mathematics, the most common components of the basic skills curriculum. Perhaps the most telling factor in this area comes not so much from those of us who study the college-bound high school seniors as from that group itself: an LSEE (Longitudinal Study of Educational Effects) study showed that 90 percent of high school seniors felt they needed more assistance in reading and mathematics to succeed in college (Chandler 1974). Ironically, a recent NIE study, cited this year by Hodgkinson at the National Conference on Remedial-Developmental Studies in Post-Secondary Institutions, indicates that less than 50 percent of college professors surveyed believe that today's student is less well prepared than a student in the past in humanities, social sciences, mathematics, science, and reading. Only 60 percent feel that students are less well prepared in writing. Such a paradox is confounding.

The very existence of basic skills programs throughout post-secondary education seems to indicate that the incoming freshman demonstrates weakness in some areas of skill essential to his success in higher education. It is evident that, for whatever reason, the college-bound student is becoming more and more academically handicapped. Finding the secondary schools culpable is not only too simple but probably too simplistic. Socioeconomic factors obviously play a part in the student's approach to and respect for the educational process, but these are factors that higher education usually addresses only tangentially and theoretically. If those in postsecondary education believe that secondary education is largely responsible for the high risk student and thus the need for basic skills programs, they have the power to alleviate that situation. Too often those in postsecondary education confuse cause for effect in claiming that elementary and

secondary school systems are to blame for the existence of basic skills programs in higher education. What gets lost in the accusation is the simple fact that postsecondary institutions are the training grounds for those very educators we wish to blame for the existence of the poorly prepared student and the basic skills programs. The problem is one that is best addressed by starting not at the bottom of the educational pyramid but at the top.

Attempting to account for the existence of basic skills programs in postsecondary education is not merely a matter of claiming that students are less well prepared; in fact, changes in institutional policies have had a massive influence on the types of students admitted to colleges. The elitist approach to admissions has gradually changed over the years, particularly after the inception of the SEEK (Search for Education, Elevation, and Knowledge) program at CUNY in 1966. Whether institutions have gone completely to open admissions or not, it is rare to find a college or university that has not modified its admissions policy and entrance standards in the past ten years. Those institutions that altered admissions policies, particularly those that went to open admissions, found it necessary to equalize more than just access to college; thus, changes in institutional policy necessitated a change in curriculum, and basic skills programs came into existence. How many students were "lost" in the time lag between a change in admissions policy and the establishment of a basic skills program is impossible to determine. As Mulka and Sheerin point out, "Simply reducing the inequality of opportunity at the point of entry into college cannot be expected to equalize fully the life chances of those from different SES backgrounds" ([1974], p. 104). Recognition that the open door could quickly become the revolving door for a high risk student caused institutions to move toward the establishment of basic skills programs.

Another change in policy (in some cases institutional but in others governmental) that affects basic skills programs is increased sources and amounts of financial aid for the college student. Through the United States Office of Education alone there are five types of financial aid programs currently available: the BEOG, Supplemental EOG, College Work-Study, NDSL, and Guaranteed Loans. In addition to aid available to the individual student, grants from the federal government are often the source of funding for basic skills programs, as Cross notes in reporting that 74 percent of the junior colleges she surveyed use federal funding to support programs for the disadvantaged student (1976a, p. 236). Thus, increased sources and amounts of financial aid have allowed more and different types of students to

attend college than ever before. Consequently, postsecondary institutions have established programs to assist the high risk student whom the federal government has helped to enter college.

Even though there has been a massive increase in financial aid (6,000 percent between 1954 and 1974 according to Cross (1976a, p. 8)), there remains a controversy over the importance of this aid in assuring not only the high risk student's entering college but also his persisting in college. Gordon claims that financial aid is the most critical factor in extending higher education to the disadvantaged or minority student (1975, p. 8), while Mulka and Sheerin contend that money is a factor in getting this student to college but not the major factor ([1974], p. 97). The disagreement is merely over the degree of importance attached to financial aid, not over the fact of its importance. Thus, a governmental policy decision has given access to higher eduaction to students that formerly would not have been able financially to attend college and, consequently, necessitated curriculum changes in the form of basic skills programs.

Just opening the door to and providing financial aid for the high risk student are not enough to insure that this student will go on to higher education. Unless students are actively recruited, there is little chance that they will pursue higher education on their own initiative. The traditional recruiting techniques, like the traditional classroom methods, probably will not be effective with these students. Just going into high schools in disadvantaged areas to recruit is in itself a new practice for many college admissions personnel. Cross reports that 73 percent of the institutions she studied work through community agencies and leaders to actively recruit nontraditional students and 67 percent report making specific requests to high school counselors for contacts with these students (1976a, p. 236). Egerton notes that one university even sends recruiters to street corners, pool halls, and bars in disadvantaged areas to contact nontraditional students (1968, pp. 11-42). Such innovative approaches to recruiting are predicated on an institution's commitment to its basic skills program, a matter that will bear some looking into.

The last factor in the discussion of basic skills problems, from a historical perspective, and possibly the most often overlooked is the impact that junior/community colleges have had on the basic skills concept itself. As Roueche and others have pointed out, two-year institutions have pioneered basic skills programs for any number of reasons. These institutions pride themselves on being "teaching colleges," i. e., their primary concern is classroom teaching, with only secondary importance, if any, placed on research outside the class-

room. This is not to say that such institutions are not innovative—far from it; rather, they view research not as an end in itself or as a means to advance an individual's career, but as a means to improve the quality of education at their particular institution. Unfortunately, these institutions are too often looked down on by senior institutions as second-class citizens in the academic world.

It would be well for those in higher education who disavow the two-year college to realize just how many students experience their initial contact with postsecondary education through the doors of the junior/community colleges. Karabel reports that fully one-third of all students entering higher education do so through two-year schools; in California the figure increases dramatically to 80 percent. Since the highest percentage of open admissions institutions in postsecondary education are two-year colleges, it is not surprising that these institutions had to confront the need for basic skills programs much sooner than did the senior institutions, despite the interesting historical fact that the first basic skills course on record was taught at a four-year college, Wellesley, in 1894 (Cross 1976a, p. 24). Indeed, most of the published research on basic skills programs stems from studies done of these programs at junior and community colleges (Baehr 1969; Losak 1971; Roueche and Kirk 1973; Cross 1976a). The reasons for centering this research on two-year schools vary: basic skills programs have existed at these schools in essentially the same form long enough to allow the conducting of valid research; the mission of these schools is to serve the totality of the community in which they are located, thus making them the logical starting point for many high-risk students; finally, these institutions are singularly committed to self-study of their programs and teaching methodologies.

However, as much as one can document or speculate about the various causes for the proliferation of basic skills programs, no sound statement about these programs or evaluation of them can be made without an understanding of those who are the basic skills students. Admittedly, one must understand the impact of precollege education, admissions policies, financial aid, recruiting, and the two-year college, but it is infinitely more important to have a clear picture of the student for whom these programs are designed.

The Basic Skills Student

Given the changes in institutional and governmental policies described earlier, one should not be surprised to find that the student body at most postsecondary institutions has changed radically over the past twenty years. Educators have invented many labels to categorize

those now coming to college who previously would not have tried to enroll or would probably not have been accepted: high-risk, disadvantaged, nontraditional, developmental, remedial, new, and many more. Since we are concerned with basic skills programs, a term currently in vogue, we will refer to these students as basic skills students. Such arbitrary tagging is, however, not the point; characterizing these students is.

Descriptive definitions of the basic skills student abound and are altered with each study of this relatively new phenomenon in higher education. A report by the United States Department of Commerce, cited by Gordon, states that the basic skills student

> has not acquired the verbal and mathematical, and full range of cognitive skills required for collegiate-level work. Generally, he is a student whose grades fall in the bottom half of his high school class, who has not earned a (college preparatory) diploma, and is assigned to a high school which has a poor record for student achievement, or who has been tracked into a general, commercial or vocational high school program. . . . Such a student will generally rank low on such traditional measures of collegiate admissions as SAT board scores, high school class average standing . . . (1976a, p. 4).

In a report on EOG, Friedman and Thompson fill in some of the gaps left by generalizations in the description above: the basic skills student is usually admitted to higher education through a special program; two-thirds are from the bottom one-half of their high school class, have low ACT's, and have not been through a college prep track in high school; three-fourths of basic skills students are minorities and 60 percent of all basic skills students receive some sort of support services (1971, p. 117). There have been attempts to abbreviate such lengthy descriptions while retaining the accurate indicators of the basic skills student. The Department of Health, Education, and Welfare simply states that the basic skills student is one who is culturally, economically, socially, and educationally handicapped (Kohrs 1969). Mulka and Sheerin claim that deficiencies in reading, writing, and mathematics define the basic skills student ([1974], p. 176). Klingelhofer and Hollander use the term "new student," by which they mean any student from a number of different sociocultural groups who has a record of low achievement in secondary school and in other educational or social institutions (1973, p. 3). Finally, Cross lists five perceived causes for low academic achievement that not only encompasses all of the above characteristics but also serves as an explanation for the aspects noted by other researchers: poor study habits, inadequate mastery of basic skills, low IQ, psychological/

motivational blocks to learning, and sociocultural factors (1976, p. 25). Cross makes no value judgment as to which of these five causes is primary, although other researchers have attempted to make such judgments.

The SES factor (Cross's sociocultural factor) inevitably takes high priority in any attempt to characterize the basic skills student. Indicators of SES are the income, occupation, and educational background of the student's family. As the first proposition of their study, Mulka and Sheerin state that low SES limits the basic skills student's opportunity for entrance, achievement, and persistence in postsecondary education ([1974], p. 67). The economic factor alone severely limits the basic skills student, who usually comes from a family with an annual income below $8000 (Gordon 1975a, p. 8). It is not merely economics Cross has in mind when she notes certain SES factors as characterizing the basic skills student. A deprived academic background is perhaps an even clearer indicator of the basic skills student. Gordon contends that these students have been victimized by poor school systems, thus accounting not only for weak academic skills but also for a wariness of formal school situations, the situation they encounter in postsecondary education (1975a, p. 5). In most instances the basic skills student already is entering postsecondary education as a certified failure by virtue of past academic performance. As Glasser points out, few children come to school initially as failures; it is the school that labels children failures (1969, p. 26); thus, their wariness of education is probably justified. Such a feeling of incompetence and impotence in the academic world must account for the psychological/motivational blocks to learning that Cross mentions.

If one has been called a failure for twelve years, identified to his peers as a failure, and formally certified a failure (grade reports, ACT/SAT scores, or class standing), it is little wonder that this student has a poor self-image. Certainly, the effect of this poor self-image is evident in the student's study habits and in his weak academic skills, two characteristics of the basic skills student. Thus, the psychological/motivational factor may be a more important cause of the basic skills student's problems than is usually recognized; in fact, some feel that a poor academic self-image limits the opportunity, access, achievement, and persistence of a student more than a low SES (Mulka and Sheerin [1974], p. 183). One can only hope that Gordon and Wilkerson's claim —that a student's low self-image derives from a realistic perception of the availability of opportunities—is fading as a result of changes in educational policy and in society as a whole (1966).

In an attempt to describe the basic skills student, one should not

overlook the fact that more research has been done on the minority basic skills student than on any other basic skills student. As valuable as this research may be, it seems to begin with a premise that may in itself be faulty, i. e., most basic skills students in postsecondary education are members of a minority group. Not only is the premise questionable, but the result of such studies may be that educators come to believe that all minority students are basic skills students or vice-versa. Although it is probably true that minority status limits equality of opportunity and access to higher education, some interesting figures are coming to light with respect to this point. Cross's survey indicates that 61 percent of the junior colleges studied report that the proportion of minorities in basic skills programs is less than 25 percent (1976, p. 235). Ethnicity in itself is not really a major barrier to postsecondary education, e.g., orientals defy every pattern established for the minority student as a basic skills student (Mulka and Sheerin [1974], p. 145). Or, as Hodgkinson points out in his presentation at a national conference alluded to earlier, NIE is finding that the new learner is not a member of a minority, as predicted, but a male Caucasian. Thus, it is important to be wary of simply assuming that when one speaks of a basic skills student he is probably speaking of a minority student.

Looking for a workable description of the basic skills student requires that one be able to distinguish effects from causes. Cross is undoubtedly correct in noting that these students demonstrate poor study habits and an inadequate mastery of basic academic skills; however, the SES factors and the psychological/motivational blocks to learning that result in a poor academic self-image are the roots of the other problems. How an institution begins to deal with these perceived causes of low academic achievement is discussed next.

Just as researchers in postsecondary education have struggled to describe, define, and tag the basic skills student, so, too, have institutions found themselves uncertain about what label to apply to the programs they design for these students. Obviously, the nomenclature is not as important as the purpose and methods of the program, but an institution may unwittingly reveal much about its attitude toward its proposed program by the title it selects.

Program Definitions

Much discussion has centered on whether to call programs "remedial" or "developmental." The initial controversy over terminology has been in some ways further advanced by criticism of a "deficit" model. The deficit model, as its very name implies, suggests an

inadequacy to be compensated for or remediated; its connotations are negative, its consequences punitive. Several authors advocate abandoning this approach in favor of a more positive and constructive one (Tinto 1974; Cross 1976). The seemingly semantic problem of developmental versus remedial is far more ideological than semantic. Fantini and Weinstein (1968a) raised a related issue earlier when they questioned the use of "disadvantaged" on a threefold basis: its value as a descriptive term when not used in relation to the economic status but to the culture of a group; its suggestion that failure lies with the student and not the educational structure; and its implication that schools have successfully served whites (pp. 21-22; see also Miller and Gordon 1974, p. 314). A similar argument has been marshalled against the term "compensatory education" by Bernstein, who poignantly asks if the term can be applied to students who have not had the opportunity for adequate education, and who come from inadequate schools whose teaching staffs are ill-prepared and highly mobile (in Passow 1972, p. 78).

Not infrequently one finds several terms used interchangeably—remedial, compensatory, and developmental. The use, however, of developmental as a euphemism for compensatory and remedial is misleading. Cross suggests that rather than focus on the pedagogical implications (Roueche and Wheeler 1973), one should focus on the goals: if the program aims at overcoming academic deficiencies, she recommends the term remedial; if it is to develop skills and talents unrelated to admission to courses or programs, the term developmental is appropriate (Cross 1976a, p. 31). Most authors have wrestled with the appropriateness of one or the other of the terms (see Astin et al. 1972; Vaughan and Puyear 1972; Roueche and Kirk 1973a). However, it is significant to keep in mind the basic assumption behind the use of any term, and that is Where is the failure posited? On the student or on the educational system?

In this regard the very concept of a deficit model is disconcerting. As Cross says, so much time has been spent emphasizing weaknesses, perhaps there is a need to shift the focus to building on strengths (1976a, p. 31). More than a "graceless and begrudging accommodation to this unpreparedness . . . [is needed as] the remedial model, which isolates the student and the skill from real college contexts, imposes a 'fix-it station' tempo and mentality upon both teachers and students" (Shaughnessy 1977, p. 293).

It has been contended that a suggestion of deficiency is ill-advised, as the supposed "disadvantaged" student often brings to the experience of higher education a positive orientation, street sophistica-

tion, and motivation (Rossman et al., 1975). Indeed, his very presence in an academic institution is no little triumph (Rondinone 1977, p. 43).

Clearly, few things are more absurd than to blame the individual for the failure of the system. Since the appearance of the Coleman report, critical awareness of the poverty of the school system to deliver adequate education, particularly to minority groups, has grown. Curiously, however, higher education has in many instances continued to penalize the individual. The student, already a victim of an inferior school system, often comes to higher education with feelings of powerlessness and an understandable wariness of education in general (McGrath 1966; Crossland 1971; Gordon 1975a; Cross 1971, 1976a).

Understandably, then, a conflict arises between the goals of higher education and the needs of postsecondary students (Cross 1971, 1976a). The very term "higher education" suggests an elitist view. In a society where two years of postsecondary education are becoming the norm, the conflict intensifies.

One of the deficiencies of the current system is that it provides "education in relation to the success of previous schooling" (Miller and Gordon 1974, p. 22). Educational institutions are faced with the challenge of removing the effects of poor teaching, inadequate resources, and the resultant negative attitudes (Coleman et al. 1966; Hull 1970; Miller and Gordon 1974), and some expect this to be accomplished in a semester! As Crossland (1971) notes, the expectation to remediate sixteen years in sixteen weeks is unrealistic. How well the term "preparation gap" applies (Blai 1976). And, one must acknowledge the existence of those who question whether remediation is even possible (Fincher 1975).

Cross (1976a) points out that the trend in remedial/developmental efforts is toward "a total program that includes cognitive, social, and emotional components" (p. 21). Acknowledging the influence of Maslow, Fantini and Weinstein insisted several years earlier that identity, connectedness, and power were by far the most significant factors to be brought to bear in urban schools. With tongue in cheek they contend this personalized approach to education would mean interfering with the machinery of the organization—which comes before the individual (Fantini and Weinstein 1968b).

The single remedial course is the least effective of all remedial efforts (Berg and Axtell 1968; Klingelhofer and Hollander 1973; Bynum 1972). As a recent Roueche study of selected community colleges reveals, the holistic approach appears to be the most successful.

In some cases, developmental skills programs have not been in-

stitutionalized and consequently are regarded as second-class, temporary, marginal, or nonacademic (Groves and Carroll 1973; Swofford and Swofford 1974; Tinto 1974). In addition to this; greater efforts still need to be made in erasing the stigma attached to remedial or developmental programs (Tinto 1974).

Piecemeal and bandaid attempts are grossly inadequate for meeting the highly complex and interrelated academic and personal needs of the students. Failure to recognize this generally signals program failure.

Expectations for developmental programs range from the implicit ideal of providing equal opportunities for all to the more down-to-earth realization that students in developmental programs have a better chance. Maybe that is all that can be expected (Rodwick and Grady 1976).

Although there is no general agreement as to where, when, and how developmental efforts should be designed, the most common approaches are:

- Precollege summer programs
- Programs concurrent with regular courses during the first semester (or two)
- Vestibule academies or holding colleges where deficiencies must be corrected prior to regular admission.

More recent studies have begun to demonstrate that those programs that are integrated into the total college rather than isolated (with the concomitant punitive overtones) tend to be more successful (Gordon and Wilkerson 1966; Fincher 1975; Gordon 1975a; FIPSE [1976]; Obler, Francis, and Wishengrad 1977). This evidence contradicts the conclusion of Roueche and Kirk (1973a) that separate programs are the most desirable. Also, the most prevalent and most successful one, the precollege program, is the most expensive and often the first cut from programs as a financial exigency on the part of the institution or because students themselves are unable to attend summer programs (Bynum 1972). Bynum found that when students perceived college as merely an extension of high school they were demoralized and concluded that extra heavy remedial doses in the long run do not remediate.

Successful developmental skills programs have been concerned as much with the student's affective development as with his cognitive growth. Although the linkage between self-concept and academic achievement has long been acknowledged, institutions of higher education have often not given more than lip service to this interdependence.

The "disadvantaged student" is frequently described as one who is lacking in self-esteem and achievement motivation, who has a negative self-image, and who scores high on measures of inadequacy and anxiety (Epps in Astin and Astin 1972, p. 14). The complex interrelatedness of these attributes underlines the need both for more effective ways to achieve long-lasting growth in a positive self-awareness and for programs to strengthen their affective components.

Although McDill warns that affective concerns might not be the most important factors in the educational process, they are quite important to a student's success (McDill et al. 1969, p. 12). McDill also suggests that a spin-off of developmental skills programs might well be the development of a reliable and valid measure of a self-concept quotient, not unlike an intelligence quotient or IQ.

A further ramification of this idea has been articulated by Bourn. Although based on a very small cohort, he concludes that self-concept of ability may indeed be a better predictor of success than over-all self-concept (1976). In another article, Groves and Carroll argue that attitude may be a more important factor in education than even pedagogy (1973).

More and more, critical awareness of the role students' feelings play in the learning process is growing. McCarthy (1975) in a study of confluent reading and English curricula notes that these feelings may affect learning positively or impedimentally; nevertheless, they are almost never deliberately conceived or structured as a component of learning and rarely viewed as objectives in themselves.

Not only does traditional education often tend to ignore the role of self-concept in the educational process; but some studies have actually shown self-image to be higher prior to taking courses (Franklin 1974). When affective development is an acknowledged component of programs, the mastery of skills can in fact enhance the student's self-concept, personal worth, and experience of internal control, and

create in him positive expectations (Johnson 1971; Carpenter in Passow 1972; O'Banion 1971; Roueche and Kirk 1973a; Tinto 1974; Gordon 1975a; Benjamin et al. 1976; Roueche and Mink 1976).

The principal areas in which a lack of affective development is most frequently evidenced are a low self-concept, a feeling of powerlessness, and a lack of achievement motivation (Kohrs 1969; Cross 1976a). Klingelhofer and Hollander have done an extensive review and analysis of the literature pertaining to self-concept and locus of control (1973, pp. 33-51, 84-101), and conclude that although it cannot be fully proven at this time, there is no question but that these factors significantly affect achievement and motivation in new students (p. 141). This conclusion is borne out by more recent studies. In particular, Roueche and Mink (1976) have tentatively concluded that "counseling for internality" is a vital element in successful programs for community college students. Failure to recognize the "inner world" of the learner can thwart any educational endeavor (Fantini and Weinstein 1968b).

Translating into the curriculum the awareness of the need to help the student develop in himself a high self-concept is a challenge. Undoubtedly, one of the more significant factors in successful developmental skills efforts is an individualized, personal program. Ruchkin succinctly notes that many programs do not take the student into consideration (in Passow 1972), a serious deficiency when programs are aimed at developing successful, self-directed learners. Fantini and Weinstein, whose insistence on humanistic education has immediate application to developmental education, describe "irrelevant education" as that which fails to recognize the student's learning style, uses material outside his realm of experience, fails to take his feelings into consideration, and does not recognize his legitimate concerns (1968a, pp. 21-22).

As a result of this, many developmental skills programs have consciously and deliberately built into them activities, counseling, courses, support services, and similar means to assist the student in developing a positive self-image. Research in this area is weak, however, largely because of the inability—for whatever reasons—to conduct sophisticated and/or longitudinal studies. Roueche and Mink (1976) note two research problems in particular: Can a three-semester study actually measure behavior change, or does it take longer for genuine change to take place? Does any academic testing situation eliminate the contamination of expectancy behavior? Put another way, Does the student learn to operate one way at school and another outside of school? Considerable effort in the future must be directed to these

two issues if the effects of developmental skills programs are to be measured successfully.

Miller and Gordon (1974) addressed the first research concern when they raised the question of what in-school, short-term, intensive treatment can do over the long haul. Tinto and Sherman (1974) acknowledge that cognitive gains may be imperceptible or nonexistent, but changes in attitudes, values, and motivation may be more important in the long run—and infinitely more difficult to measure. A further question is raised by Astin et al. (1972) in determining the conditions under which a person can revise his self-image (see also McDill et al. 1969).

Efforts to develop the student's self-image have led to greater and more deliberate attempts to integrate ethnic studies and awareness programs into the curricula. Although little research exists to prove the effectiveness of this approach, it remains high on the list of ingredients in successful programs (Etzioni 1970; Groves and Carroll 1973; Morrison and Ferrante 1973; Fincher 1975; Lopate in Miller and Gordon 1974). Literature in support of ethnic studies runs the gamut from unquestioning necessity for this component to mild tolerance for the same.

The strongest arguments for the inclusion of some form of ethnic, cultural component come from acknowledgment that ethnic identity is a key factor in self-image and that cultural enrichment and multicultural experiences are important functions of the educational process (Fantini and Weinstein 1968a; Hull 1970; Morrison and Ferrante 1973; Morrison 1973; Miller and Gordon 1974; Gurin and Epps 1975; Gordon 1975a; Fincher 1975).

Without a doubt, "more of the same" dooms a developmental skills program from the start. Clearly, more grammar, composition, reading, and computation taught in the same manner as in the previous twelve or more years will not succeed: it did not then, it cannot now (Shaughnessy 1977). Hence the search for newer, nontraditional methodologies creates a heavy burden on developmental programs. One thing emerges from the literature with absolute and irrefutable clarity: the search for a generic developmental skills program that can be universally adopted and that would prove universally successful is futile. Not only must programs be individually tailored from campus to campus, but they must also be uniquely modified: designed from student to student. Recognition of individual differences—from learning styles to rates of growth—has led to greater and greater use of Bloom's concept of mastery learning: any person can learn anything given the appropriate assistance and sufficient time (1971). Re-

cent research has attempted to correlate this concept with the student's need to be his own locus of control, and the results—although tentative—are positive.

Another key factor in individuated programs is the awareness of unique learning styles (see Cross 1976a, pp. 111-135). Ranging from the simple use of multiple methods within the individual classroom to highly sophisticated cognitive mapping, this awareness of varying learner styles has had profound influence on developmental programs.

The more common components of developmental skills programs are:

- Reading
- Grammar
- Math
- Science
- Ethnic studies
- Study (survival) skills
- Self-development
- Career/life planning

However, many institutions refuse to see the inclusion of these courses as a signal that the entire institutional curriculum may need review and revision (Astin et al. 1972, p. 5). Instead, these courses are designed solely to prepare students for the rather inflexible, traditional course curriculum.

The role of career and life planning in higher education has come to the fore lately because of its function as a motivating factor (Groves and Carroll 1975; Connecticut University 1975). Much research is needed to prove its effectiveness; its usefulness, however, should be obvious.

With an eye toward assisting the total person, developmental programs have also extended services to include medical, financial, and legal counseling and/or referral (Bynum 1972; Parks 1976). On the other hand, Roueche and Mink (1976) propose that instruction itself is a necessary but insufficient condition of the changes sought and that other elements are equally important, such as counseling strategies (see also Astin et al. 1972).

Many claims have been made for the identification of the "most promising," "most effective," "most successful" factor in a given program. The faultiness of the logic in these cases is only superseded by the faultiness of the data to support such assumptions. The inability of most researchers to adequately isolate and test individual variables would alone refute such statements.

A constellation of factors, however, may indeed be identified from

the vast amounts of impressionistic data. FIPSE National Project II has identified several factors from the individual programs within the project. These may serve as a base for the identification of those myriad, complex, and interconnected experiences and elements that contribute to successful programs. These factors have been summarized by Richard Donovan, the project director.

- Programs are physically located so as to be simultaneously separate and central to campuses.
- Most programs recognize the importance of the first semester and "cheat" in budget disbursements.
- Students' motivation and persistence are regarded as more important than traditional predictors of success.
- Structured, precollege, comprehensive orientation programs are essential.
- Rules are established and articulated and often contracted by students.
- Programs provide a positive environment for the development of a better self-image.
- Support services are responsive and flexible.
- First semester grade-point averages are not regarded as all that important.

Many of the contenders for "most" significant elements are found in these nine attributes. It is obvious, then, that no one factor "consistently and unambiguously makes a difference in student outcomes" (Averch et al. 1972, p. x).

Nevertheless, the process of identifying those features of successful developmental programs that have contributed to their success has been and continues to be a serious challenge to program evaluation.

It cannot easily be argued that planned interventions in the affective domain is not often a necessary precondition of cognitive growth (Bynum 1972). If the definition of the nontraditional student as one with limited ego strength, weak in internal control, who is also uncertain about his personal identity (in Roueche and Mink 1976) is at all true, an educational process that fails to take these factors into consideration and does not seek to eliminate or reduce them is doomed to fail (Kohrs 1969; O'Banion 1971).

Institutional Policies

An institution must first determine under whose aegis a basic skills program will appear. The sponsoring unit for basic skills programs varies throughout postsecondary education, but there are two approaches that appear more often than others: establishing a separate

department or division of basic skills, or simply adding isolated basic skills courses to the curriculum of already existing departments or divisions. The latter method has been used more widely because few institutions recognized the magnitude of the changes in postsecondary education that governmental and insitutional policy decisions would bring about. The process of adding courses to an already established department curriculum is much easier administratively than is the formation of a completely new academic department or discipline on campus. Some research indicates that the most successful basic skills programs in postsecondary education are those that are entities unto themselves. Roueche and Kirk conclude their study with several recommendations for the establishing of successful basic skills programs, one of which is that a separate division of developmental studies be created with its own administration and faculty (1973, p. 83). Snow describes a basic skills program as a department or division with control over its own curriculum, funding, counseling, and support services (1977, p. 7).

Perhaps some clarification is needed here in the light of studies cited earlier that indicate that programs integrated into the total college rather than isolated from it are proving quite successful. "Department" in this discussion of sponsoring units may be a misnomer or, at least, deceptive; however, that designation more closely approximates our concept than any other. We are concerned here with indicating that the basic skills courses be grouped under some recognized and autonomous unit on a college campus rather than existing in some amorphous state that might cause such courses or programs to be viewed as merely tangential to the college and its mission. Such autonomy, far from separating the courses from the total college, might actually serve the desired purpose of integration, in that grouping other college courses under a recognizable entity tends to gain legitimacy for those courses.

Any academic department has explicit objectives and some implicit concerns; the unit is actively interested in those who are interested in it, i. e., students majoring in that discipline. This concern and these objectives allow for a commonality of mission among the faculty in that department. Tacking on basic skills courses to an already established curriculum means adding students who are demonstrably deficient in that discipline and who are probably not potential majors in that area. Thus, that department is charged with a responsibility that does not fall under its stated objectives or implicit concerns. The attitude toward these courses and, in some cases, the treatment of the students in them is less than professional.

Researchers repeatedly find that the academic departments staff these appended courses with the least experienced instructors, the junior members of the department, or part-time instructors. The value judgment is obvious and is based on a misunderstanding of the basic skills concept and the basic skills student.

Basic skills courses are undoubtedly the most difficult courses to teach in all of postsecondary education. The basic skills student, as described earlier, has problems that an instructor rarely encounters with majors in his academic discipline or even with other incoming freshmen. Thus, to assign the faculty lowest on the departmental "totem pole" to these basic skills courses is to show a lack of concern or understanding; worse yet, such assignments reveal an insidious equation of "lowest faculty" and "lowest student." A pattern of such faculty assignments reveals a disdain for the appended basic skills courses, and an instructor consistently assigned to such courses by virtue of his departmental status will probably reveal his dissatisfaction in his classroom method and manner. If academic departments are going to continue to include basic skills courses in their curricula, then Roueche and Kirk recommend that only volunteers be given the basic skills courses (1973). However, as most department chairmen recognize, it is difficult to get the most experienced, senior faculty members to volunteer for such courses regularly.

Establishing a separate division or department of basic skills removes many of these problems. A department of basic skills has a commonality of purpose and, for the most part, a shared bank of students as well as a faculty committed exclusively to basic students and their particular needs. The director of such a program should be equal to a department chairman in every way so that the program, the students, staff, and faculty have one who will speak with authority on campus (Mulka and Sheerin [1974], p. 411). With full departmental status a basic skills program has less difficulty with budget and funding than does a nebulous program that operates with "loaners" from other academic disciplines. Budgeting becomes even more important in a basic skills program when one realizes, as Roueche and Kirk point out, that the courses with the heaviest enrollments are those that are categorized as remedial or compensatory (1973, p. 6).

Most important in deciding in favor of a department of basic skills is the ability of that department to select its faculty rather than having them imposed on it by other academic disciplines on campus. The department chairman has the authority and the responsibility to hire those who are experienced in the field, who are trained in basic skills education, and, above all, who are committed solely to the basic skills

concept. Permanent faculty in a basic skills program provide continuity to the program. Each is, certainly, concerned with his own area of expertise in the department, but the overriding concern is basic skills rather than basic skills in a particular field, since classroom methodology in a basic skills program cuts across disciplinary lines. Then, too, basic skills programs have their "majors" and allow for a depth of concern for these students rarely found when other academic disciplines teach basic skills merely as part of a larger curriculum.

This concern is shown in many ways, particularly in the in-service training that is going on in departments of basic skills, up 11 percent from 1970 to 1974 according to Cross (1976a, pp. 10f). Also, Cross reports that 54 percent of institutions responding to her survey claim that they pay all expenses for faculty to attend basic skills conferences and workshops (1976a, pp. 237f). Such training is essential in view of the paucity of formal coursework in basic skills education (reading excepted) offered at senior institutions or graduate schools. Ironically, the same senior institutions, which do not offer these training courses, advertise for basic skills faculty members with such formal training. At any rate, it is essential and completely logical that basic skills courses be offered under the sponsorship of a department of basic skills. Just as instructors in historically recognized disciplines do not work individually or independently of a department but feel the need to band together into a unit with a common purpose, so it should be with basic skills.

Once a department is established, it must determine how to select its students. Much has been said earlier about admissions from the institutional point of view, and that discussion obviously impinges on this area. Open admissions refers primarily to admitting a student to an institution; whether that student is admitted to a given program is an entirely different matter. Postsecondary institutions use numerous methods to identify the potential basic skills student: grade-point average, class standing, ACT/SAT scores, Nelson-Denny grade equivalent, locally generated examinations, and others. Most use some combination of these methods. Snow reports that locally generated examinations rank highest as a method to identify the basic skills student; Nelson-Denny is next, and ACT is third (1977, App. A, p. 3). These methods reinforce the contention of Astin et al. that institutions should not punish students for a lack of precollege preparation, but neither should they abolish all standards; to do so would be patronizing and suggest that the student is not capable (1972, p. 25). Using locally generated examinations is a way of not ruling a student out of higher education, while maintaining a standard that will

identify the student who needs basic skills courses and keep him from becoming a statistic in that institution's attrition rate. The particular institution knows more about what it requires of a student than does a framer of standardized tests; thus, using locally generated examinations for admission to or placement in any program, including basic skills, is much more equitable and effective.

A postsecondary institution and its basic skills department must determine, once they have identified a basic skills student, whether to require that student to enroll in the basic skills courses. The controversy over this point still rages in higher education, but a trend does seem to be taking shape. Cross reports that colleges requiring remediation decreased from 79 percent to 59 percent in the period between 1970 and 1974 (1976a, pp. 10f). Snow's 1977 figure is even higher, indicating that 89.7 percent of institutions surveyed do not make remediation mandatory (App. A, p. 4). Still, there are institutions who are blind to this trend. The University System of Georgia, for instance, requires all its member schools to make basic skills courses mandatory, although the method of identifying the basic skills student is left to the discretion of the individual college.

Before making any evaluation or recommendation about requiring students to take basic skills courses, one must first consider a related policy, credit for basic skills courses. Here, the controversy becomes more heated and often less rational. Many feel their institution's academic standards are coming under fire. Ben Alexander, president of Chicago State University, stated at the March 1977 general meeting of the National Conference on Remedial-Developmental Studies in Post-Secondary Institutions that he was opposed to granting any credit for basic skills courses but admitted that taking such a strong stand put him in opposition to about 80 percent of his faculty. His faculty's opinion appears to reflect a national trend on the matter of academic credit for basic skills courses. Astin et al. believe that at the beginning of a basic skills student's postsecondary education, credit is more important than mastering academic skills (1972, p. 30). Whether it is this judgment that has motivated other institutions to move toward granting credit for basic skills courses is unclear; the movement itself is clear and documented. Cross reports that between 1970 and 1974, institutions not granting credit decreased 5 percent while those granting degree credit increased 21 percent (1976, p. 236). In 1977, Snow reports that 65 percent of the institutions surveyed grant degree credit (App. 4, p. 6). Having completed their study of basic skills programs, Roueche and Kirk (1973a) and Cross 1976a) recommend that institutions grant degree credit for basic skills courses.

Despite these figures and recommendations, many faculty members hotly oppose credit for these courses, arguing that what a student learns in a basic skills course is that which should have been learned in elementary and secondary school. Another frequently held position is that granting this credit cheapens the credit in all courses offered. Those who favor granting credit contend that the courses are offered by a college, taught by college instructors, and usually cost the student as much as any college credit course. The compromise position, granting institutional credit only, is often just another way of saying "no credit," in that the grade earned may be a traditional one and may be entered on a student's permanent record, but it is effectively just a ticket into the next course in a sequence that does carry degree credit. Usually, an institutional credit has no bearing at all on a student's grade-point average.

As noted earlier, the controversy surrounding required basic skills courses is undoubtedly tied to the disagreement over granting credit. Requiring a student to take basic skills courses but refusing to grant credit certainly causes motivational problems for the student. At bottom, this practice is patently immoral. An institution's admission policy assures the student that he is not being penalized for the quality of academic work up to this point; but then the institution does penalize him by forcing him to pay in money and unrewarded time for that which he has not mastered prior to his admission. Even if an institution does not require students to take basic skills courses, it should recognize by granting credit not only that the student has mastered a particular course, but also that the student has recognized his deficiency and done something positive on his own initiative—an important step for the basic skills student in improving his academic self-image. About the only way in which an institution could justifiably refuse to grant credit would be to offer these courses at no cost to the student. Surely, when postsecondary institutions have no qualms about granting degree credit for basketball or automotive repair, they should not, in conscience, object to granting that same credit for courses that are *at least* as academically sound. Granting degree credit, then, is probably the solution to the controversy over requiring students to enroll in basic skills programs. The college student is readily aware that some courses are required and submits himself to these requirements, usually with something less than enthusiasm; however, he realizes he is earning credit toward his degree. Even those institutions that continue to insist on required basic skills courses could alleviate the problem for the student and the instructor by granting degree credit.

The problem of requirement and credit does not simply end here. The institution or basic skills department must decide on the method of grading in these courses. The question is whether to use nonpunitive grading or completely traditional grading in basic skills courses. Many faculty members object to the nonpunitive method, arguing that negative grades often serve as positive motivation for the student in future courses; however, this argument is usually based on the traditional student who rarely sees a low or failing mark and would be frightened by it into a concerted effort to improve. The basic skills student has usually seen nothing but low marks throughout his education, none of which have served to motivate him. Removing the possibility of a failing grade in a basic skills course removes completely that area into which the student has comfortably and expectedly fallen throughout his school years. It bears reiteration that if an institution's admission policy claims it is designed not to punish a student for his precollege education, then failing him in a basic skills course is tantamount to penalizing him for that which did or did not take place prior to his entering postsecondary education. Roueche and Kirk agree and recommend, based on their evaluation of basic skills programs, that nonpunitive grading be a part of any such programs (1973, p. 87). One should not assume that nonpunitive grading represents a complete dismissal of grading standards. Basic skills courses should be competency-based and graded on a standard comparable to standards used in nonbasic skills courses. Indeed, as Cross points out, if mastery is the goal of a basic skills course, then an absolute grading standard is essential (1976a, p. 82).

The final policy regarding basic skills programs that merits examination is duration, i. e., the length of time a student is allowed to remain in a basic skills program or a basic skills course. One can reach such a decision arbitrarily by deciding, for instance, that a student may remain in a course for a year, but such policies are best made based on the objectives of the program or the course. If a program is using a mastery learning method, in which attainment remains constant but time varies, then no duration can or should be imposed. Even if this method is not employed, it is probably unwise to impose a time limit on the basic skills student. It is essential that the student know the instructor's expectations for him in completing classroom work and in completing the course, but putting a time barrier up somewhere down the educational road is hardly profitable. A basic skills student did not come to college to be a basic skills student, but to enter a major or a field just like any other student; therefore, he is just as interested in moving on as is any other student. Any

student who seems to be taking an exorbitant amount of time to complete a course in view of his tested ability in that subject should be a target for the counselor as well as the instructor. An effectively administered department of basic skills, however, would be aware of such a student and act to aid him.

As important as all these institutional policies are regarding admission/placement, academic credit, grading, and duration in a program each can be easily formed and administered by a department of basic skills. Allowing such key decisions to be made by institutional policy committees and then forced on various existing departments is certainly not an advisable or workable method of approaching the problem. A soundly designed and professionally staffed department of basic skills can effectively formulate its policies based on the institution's goals, the student's needs, and the department's own capabilities. One of the key decisions such a unit must make is what support components the program will need to succeed and how these components should function.

Support Components

Regardless of the courses formally included in basic skills programs (English, reading, and mathematics appear more often than any others), certain supportive services loom large in the overall effectiveness of these programs. Ideally, these services are incorporated into the department of basic skills, but it is not uncommon to find these components as already established units servicing all students in an institution. Specifically, we are referring to a needs-assessing unit providing placement and/or diagnostic testing services; a counseling center staffed by professional and/or peer counselors, and a tutoring service similarly staffed. In addition to these support components is some form of media laboratory or learning assistance center staffed in a manner similar to the counseling and tutoring units, its objective being to assist only the basic skills student or, in some cases, the entire student body. As helpful as these service units may be to the successful operation of any postsecondary institution, they are essential to an effectively managed basic skills program.

Needs assessing accomplished through some sort of testing, usually standardized, may begin at the initial point of entry into postsecondary education. That is, the student may take some form of placement examination prescribed by the school for all incoming freshmen. As noted elsewhere, these tests may be provided by national organizations, CEEB or ETS for example, but are typically locally generated tools. Such instruments function almost exclusively as in-

stitutional methods of prescribing general curriculum for the new student, e.g., at which level of English a student should begin. It is unfortunate that counseling and testing centers have not managed to coordinate such examinations with basic skills programs and all other academic disciplines. This would promote the use of one battery of tests for placement and another for diagnosis. Rarely, then, are these across-the-board tests useful to a basic skills program in any way other than identification of a student as a potential basic skills student. Applying established performance norms to these tests results in identifying the basic skills student but fails to identify the specific reasons for the student's test performance. Therefore, basic skills programs must do further testing to diagnose clearly the individual academic weaknesses of the basic skill student.

Programs that only use a placement result without performing follow-up diagnostic testing usually end up shooting in the dark in their approach to what areas of a discipline they need to address for each student. Too often, these programs have a preconceived notion that all basic skills students share specific academic weaknesses and can overcome these deficiencies by submitting themselves to an already established curriculum or course content. This "scatter gun" approach assumes that all basic skills students will benefit to the same degree from being drilled over the same material for the same amount of time; i.e., by firing a full load of material in a particular course, the instructor is bound to hit each student's target area of deficiency. The time and effort wasted with this method should be obvious. The starting point, then, to a successful approach is accurate diagnostic testing. Stephen Adolphus, Chief of HEOP in New York, explained in a presentation on diagnostic and prescriptive testing at the National Conference on Remedial-Developmental Studies in Post-Secondary Institutions earlier this year that the result of diagnostic testing must be a specific, not a general, statement of weaknesses. For example, knowing that a student tests at the eight-grade equivalent on a standardized reading test or scores 25 percent on an English examination is useless information diagnostically unless the basic skills staff interprets those scores in terms of specific deficiencies.

What accurate diagnostic testing allows one to do is tailor a program to the individual student and his needs, that is, to provide an individualized instructional package for each student. Fortunately, more and more postsecondary institutions, 96.7 percent of those Snow surveyed (1977, App. 4, p. 6), based pretesting not only on prerequisite skills but on the ability of the basic skills program to provide material and instruction necessary to remedy the identified deficiencies.

Thus, basic skills programs are preparing themselves to address specifically and individually the student's deficiencies before the student demonstrates a weakness via testing. Such individualized instruction, most commonly provided in a learning assistance center of some sort, is all but universal in basic skills areas. Hawkridge et al. note throughout their report that successful basic skills programs include highly individualized instruction (1968). Methods of achieving this vary, but the need for this component in basic skills programs remains constant. Cross outlines five principles of successful individualized instruction: active, not passive students; clear goals for the students; small modules of learning; evaluation through frequent testing; and self-paced learning (1976, pp. 52ff). Reportedly successful basic skills programs tend to adhere to these principles in theory, although the methods vary.

Although Cross's five principles of individualized instruction apply to classroom work, they appear to function to an even greater degree in a support component referred to variously as a learning assistance center, developmental services center, basic skills clinic, and others. The prevalence of this support unit is undeniable; Snow reports that 84.1 percent of institutions surveyed have this type of facility to support their basic skills program (1977, App. 4, p. 4). Methods and material used in these centers (hereafter referred to as BSC's) are as diverse as the nomenclature used to identify these support components; however, certain common denominators do appear.

A few postsecondary institutions with the financial and professional capabilities use computers in the BSC. The usual distinction drawn in the BSC's use of computers is between Computer Managed Instruction (CMI) and Computer Assisted Instruction (CAI); the use of the former is primarily diagnostic, while the latter represents an actual on-line interchange between student and computer in individualized instruction. Computer use is not that common for practical reasons, although those employing CAI in language skills find that method extremely effective (Ornstein 1975). CAI meets several of Cross' principles of individualized instruction, namely, self-pacing and activity rather than passivity.

More common than CAI, yet meeting the same student need in relatively similar fashion, is the use of self-paced modules in a programmed-instruction context. Such modules, designed to encompass as many cognitive modes as possible, meet all of the principles for individualized instruction. In 1974, 73 percent of the institutions Cross surveyed reported using such modules (1976a, p. 23). Roueche and Kirk note that such learning packages are common in successful basic

skills programs and recommend their use (1973, p. 88). Using self-paced modules in a BSC does not preclude the use of any particular method of classroom instruction; for instance, Bloom's mastery learning approach to basic skills instruction is probably best served through the use of self-paced modules. It is worth noting that the University of Michigan's Center for Research on Learning and Teaching believes that self-paced, supervised study arrangements will become a lasting procedure for certain kinds of courses in many departments of the university (Cross 1976a, p. 76). It is not surprising that the use of such modules, both in the classroom and the BSC, proves effective with the basic skills student. Throughout his precollege career the basic skills student has been a passive listener in the classroom, has been expected to keep pace with the classroom norm as the instructor perceives it, has been made to absorb massive amounts of material over which he is infrequently tested. Rarely has the individual student been at the center of the program in which he finds himself. Nor is it shocking to find, as Cross did, that the most effective approach to basic skills instruction is the use of the self-paced modules, with the BSC as third on the list of most effective approaches to basic skills instruction (1976a, pp. 238f).

What falls between these two approaches as the second most effective method in aiding the basic skills student is counseling, particularly peer counseling. As obviously important as counseling is in any post-secondary institution—in fact, Moore believes that the counselor is the pivotal staff member in any basic skills program (1970, p. 86)—there is little clear evidence as to what approach is most effective. Gordon bemoans the inefficiency of counseling procedures for basic skills students (1972), while Rossman et al. find that there is higher attrition on the part of the basic skills student who receives personalized counseling (1975). This latter report is very disturbing. However, the explanation may lie in Mulka and Sheerin's report that programs that aim at improving the basic skills student's poor self-image solely by empathy or role playing, while lacking a basis in graded academic achievement, are doomed to failure ([1974], p. 189). Thus, it is crucial that counselors recall they are dealing with students who have poor *academic* self-images. Since, as Cross contends, the classroom instructor must be concerned with both the cognitive and personal sides of the student (1976, p. 42), the ideal counselor in a basic skills program is the instructor who is also a trained counselor. Along the same line, the peer counselor is probably so successful simply because he has more experience at being a student than he has at being anything else. His age allows him to deal with the student's

personal difficulties in an empathetic manner, and his very position in the same academic maelstrom as the student he is counseling makes him an ideal advisor for the student with a low academic self-concept. A professional counselor can say to a student, "I understand what you are going through," but the peer counselor can say "I went through the same thing you are going through." For the basic skills student there is no authority stronger than shared experience. Certainly, the basic skills program must be as careful about employing peer counselors as it is about employing faculty. The proven impact of the peer counselor on the basic skills student is too massive to entrust to one who might undermine the program's entire concept or the student's confidence. Although basic skills counseling remains a clouded area, as we have learned, as Snow reports, the use of peer counselors and tutors definitely distinguishes the most effective programs from the least (1977, p. 6).

The final support component in this discussion is tutoring, an area as nebulous as counseling. Tutoring includes classroom instructors working officially and unofficially with basic skills students, staff professional and peer tutors, and the computer as tutor. Regardless of the method used, most basic skills programs in postsecondary education claim to have some sort of academic assistance available to students in the form of tutoring. Ferrin found as early as 1971 that 84 percent of all midwestern community colleges had tutorial programs. In 1974, Ruskin reported that PSI (personalized systems of instruction) succeeds only by the addition of peer tutors (pp. 13f), while Cross's survey included the fact that 64 percent of those she surveyed used peer tutoring (1976a, p. 237). Once again, the use of the student's peer in an official capacity surfaces as a very effective tool in a basic skills program. To use peer tutors is probably an even more sensitive decision for a basic skills program to make than the decision to use this group as counselors. Ideally, as Snow indicates, tutors should have training in both teaching and concept developing techniques (1977, p. 6). Having been a basic skills student does not necessarily qualify one to be a basic skills teacher; however, the technique that the basic skills "student turned tutor" used to master the material may represent a mode of learning unknown to the basic skills faculty member but extremely valuable to the basic skills student in need of tutoring. Care must be exercised, then, not only in the employing of peer tutors, but also in the monitoring of their work with basic skills students.

It is clear from research into basic skills programs that these programs must contain more than courses specifically designed for the student if they are to be effective. After all, the student has already

spent at least twelve years in structured programs with definite curricula. Basic skills programs must go beyond these essentials to deal with the totality of the student's needs. Thus, basic skills programs must include adequate and accurate needs assessing through the use of validated diagnostic tools, BSC's with self-paced modules designed specifically to meet the identified academic needs of the student, both peer and professional counselors concerned about improving the basic skills student's academic self-image, and peer and professional tutors dedicated to assisting basic skills students academically. Such components of basic skills programs are usually viewed as support units but are, in fact, as integral a part of the successful basic skills program as any course in the curriculum.

Evaluation: Present Problems

Manifold problems emerge in any discussion of how to evaluate basic skills programs. Many programs have been hastily and poorly designed, lack clear goals and objectives, and have inadequate procedures for data collection. Often, in cases such as these, the student is viewed as the failure rather than the program. It is often forgotten that the "lack of careful planning and clearly set goals have contributed more to [program] failure than any lack of merit on the part of the educationally disadvantaged students" (Gordon 1975, p. 15). Sol Gordon argues this same point when he contends that compensatory education is "bankrupt" because it concentrates "on the student's failure to learn rather than the school's failure to instruct" (1970, p. 361; see also McDill et al. 1969; CEEB 1975; Tinto 1974; Miller and Gordon 1974; Cross 1976a).

Regrettably, student assessment is often synonymous with program evaluation (Bynum 1972). There is no doubt that adequate identification of factors that contribute to success is difficult (Williams 1969) and that most developmental skills practitioners are not trained in research methodology.

Educational evaluation is difficult at best—impossible at worst. Part of the problem is caused by the fact that in developmental skills programs, diagnosis and remediation often occur concurrently (McDill et al. 1969); the cause and the cure are sought together (Gordon 1967). Educators are also reluctant to divert minimal monies from actual programs to evaluation; hence, programs continue with little or no adequate evaluation (McDill et al. 1969; Greenleigh Associates 1970).

In addition to these two factors, four rather significant interrelated problems exist:

- The ethical question of having a control group
- The fact that programs and staffs change too quickly
- The lack of defined, measurable goals
- The alteration of too many variables at one time.

The complexity and interrelatedness of these problems should be apparent. The *ethical question* of not using a technique believed to achieve positive effects on a control group for the sake of gathering valuable data poses a real problem and cannot be ignored (Miller and Gordon 1974; FIPSE [1976]). It has been suggested that control

groups be identified from existing populations in lieu of creating these groups, but the identification of comparable groups is extremely difficult.

A frequent complaint voiced about developmental programs is the *rapid turnover of staff*. There is, however, some evidence that this may no longer be the case (Roueche and Snow 1977). Perhaps some of the onus and second-class status surrounding remedial programs and staffs have been dissipated by the growing magnitude of the problem.

The failure to identify clearly *defined, measurable goals* is also a complex issue. Can a one- or two-semester remedial/developmental program make up for twelve years of unsuccessful education? Obviously this may be an unrealistic and questionable goal. How, then, should developmental programs be evaluated? One approach gaining in acceptability and use not only with program directors but also with funders is MBO (Management-by-Objectives), where attainable, quantifiable results are identified and measured at appropriate times. This approach has rather obvious drawbacks, in that it is often short-term and possibly short-sighted; nevertheless, it does begin to provide some base for measuring success or lack of it in developmental programs.

A related difficulty is the inability or questionable desirability of *isolating and testing individual variables*. FIPSE [1976] has identified nine common factors in successful programs: central location of programs; unorthodox distribution of funds; the use of motivation and persistence as predictors; precollege orientation programs; establishment of clear rules; positive environment; extensive counseling; flexible and responsive support programs; and cautious assessment of first-semester grade-point averages. Basic research would demand extensive testing of each of these nine. The question arises, If these are known or presumed to be ingredients of effective programs, should they be withheld to enable researchers to gather certain kinds of data?

If the search for a generic program is folly, so, too, is any attempt to isolate a single factor in the success or failure of individual programs. In addition to this conclusion—that no one factor universally and unambiguously makes a difference in learning—Averch et al. (1972) also contend that increasing expenditures is not likely to improve education; in fact, redirection and reduction may be possible without negatively affecting the results (pp. xxii-xiv).

Averch also points to four limitations of education research:

- Data are crude
- Outcomes are measured almost exclusively by cognitive achievement

- There is generally little examination of cost implications of research results
- Few studies are adequately controlled (pp. ix-x).

In addition, often compensatory education research and the related theory and policy implications are based on studies of children, with extrapolation to the new adult learner: a tenuous analogy at best. McDill et al. (1969) (who frequently do draw their conclusions from studies of children) raise questions about what are program effects and what are maturational effects.

Research often cannot adequately assess the impact of programs either because critical variables have not been identified or instruments are not sensitive enough to measure it. Mackler (1970) argues that procedural, interactional, longitudinal research is necessary.

There are many allied problems. For example, there is a fear that research results may threaten staff, money may be withdrawn, and directors and/or staff may be unwilling (or incapable) of resolving inadequacies (Gordon 1975b). Many programs were hastily conceived for political exigency (Miller and Gordon 1974). Also, too often it is difficult to identify a comparable control group; so the ethical question of creating a control group and denying it treatment clouds the picture.

As the search for a remedy continues, there is an associated problem of implementing too many changes at once and of altering a program once initiated; both of which nullify research results. There can be no question of the usefulness of continuous feedback (Sheerin 1974) and of restructuring and modifying programs (Suchman 1967; Eboch and Stufflebeam 1974; Miller and Gordon 1974).

In addition, the seemingly simple problems—clearly establishing goals, objectives, methods of data collection, etc.—cause other research nightmares, such as: the Hawthorne effect (any intervention produces a positive effect); the Rosenthal effect (changed level of expectancy determines level of performance); the contamination of horizontal or vertical radiation (an older sibling or a peer affects behavior and/or motivation changes); sociobiological factors (effects are the result of improved nutrition and health habits); a charismatic teacher (student has been inspired by a person independent of any program component); the Pygmalion effect (the teacher "creates" his students). For those who demand pure experimental research, controlling for these factors can be virtually impossible.

In addition, statistical data should include those variables known to affect learning:

- Sex

- Years since high school or formal learning
- Educational level at time of admission
- Age
- Environmental factors

No one can deny the twin dilemmas of evaluative research on developmental programs: the first, the double standard that demands developmental programs be more accountable than traditional education (FIPSE [1976], pp. 3-4); and secondly the demand for rigorous, sophisticated evaluation of projects, which sometimes precludes the freedom to experiment with high-risk projects (Miller and Gordon 1974, p. 181). Perhaps until all educational systems and structures are held accountable, the first dilemma will persist. In fact, developmental skills programs may be able to set the pace as well as design new methods for responsible and responsive evaluation of all education.

Moreover, higher education is beginning to face the legal problems of accountability and responsibility: Peter Does may accelerate the efforts to create models and measures of effective programmatic evaluation. The literature is just beginning to address seriously the tort liability that results from breach of an implied contract between the student and the school he or she attends (Roueche and Snow 1977).

The second dilemma poses a unique challenge not unrelated to the first; that is, how to define the parameters of experimental projects, to identify measurable and obtainable results, to propose tested models capable of replication, and to measure the long-term effects of specific interventions. In this regard, McDill et al. recommend that research on new, untried programs be conducted by "interested and favorably biased people" (1969, pp. 5-6). When one observes that the vast amount of "research" on developmental skills programs has been self-reported, descriptive narratives, or testimonals, one realizes what a monumental task it is to get empirical data (Cross 1976a).

Since most narratives are self-reported descriptions of programs, the potential bias of such procedures cannot be overlooked. Voluntary participation and self-selectivity are also artifacts that must be taken into account by controls (Tinto 1974). Nor can the dilemma of incomparability be easily resolved: many programs are not replicable, although as any researcher knows it is important to determine if the same intervention in a different setting will achieve the same results. By the same token the question also arises, Would a different intervention in the same setting be equally effective (Tinto 1974)?

Additional factors that interfere in the evaluation of developmental programs are often a confusion between personal goals and expectations and program goals and the conflict of survival goals, or basically

a desire not to see the program fail or be discontinued (Deniston et al. 1968). Ruchkin faces these issues squarely when she maintains that the "risk" in "high risk" is not only the academic survival of the students but also the continuation of funding and institutional support (in Passow 1972). Unfortunately, as the need grows for greater diversity and greater risk in experimenting in new programs, the resources and funding often begin to decline.

Toward a Solution

Assailed on all sides for the "paucity," "famine," and "desert" of reliable research, how should developmental programs proceed in evaluation? One of the most useful conceptual frameworks for evaluative research has been advanced by Suchman (1967) and is rooted in social action programs. He proposes five categories of criteria by which programs may be evaluated. Having distinguished between effort and effect, he advances the following:

Effort: an assessment of input, the quantity and quality of activity, regardless of output

Performance: a measurement of the results of the effort

Adequacy of performance: a measure of the degree to which effective performance meets the identified need(s)

Efficiency: the evaluation of alternatives in terms of money, time, and personnel; a ratio between output and input

Process: admittedly not an inherent part of evaluative research; an examination of the:

- attributes breakdown into component parts
- population affected by program
- conditions of location, time, auspices, and the like
- different kinds of effects: simple or multiple; anticipated or unanticipated; duration; cognitive, affective, and/or behavioral (pp. 60-71).

Clearly such a comprehensive framework could well provide the basis for an effective evaluation element.

Other approaches to evaluation include cost-effectiveness analyses; however, the problems of determining benefits in social action programs are formidable to say the least (Garms 1971, 1973; Cristoffel and Celio 1973). An empirical approach to the difficulties inherent in cost analysis may be useful to someone contemplating using this procedure (See Carman 1971).

Typically, start-up costs are higher than operational costs, and a cost analysis needs to take this into account (Haller in Popham 1974, pp. 406-449). On the other hand, as the need for greater experimentation

within developmental programs grows, the need for continued high levels of funding may often remain (Provus in Worthen and Sanders 1973, pp. 205-206). Use of cost-benefit analysis is generally recommended when alternatives are being examined prior to a decision to implement.

The conceptual distinction between formative and summative evaluation may also be useful, as the former examines process while the latter evaluates product (Scriven in Worthen and Sanders 1973). Although some educators eschew this approach (FIPSE [1976], p. 20), it does have merit by helping to formulate a two-part evaluation model.

FIPSE National Project II proposes a three-part evaluation method based on performance figures, management information, and comparative data, further distinguished by aspects of short- and long-term measures (pp. 20-21). Its merits lie in the fact that it was generated by practitioners in consultation with evaluators. Further development of this as well as alternative models should yield a reliable, valid, statistically sound basis for evaluating developmental programs.

Conclusions and Recommendations

Even though the search for a generic program or treatment is futile, it remains imperative that certain elements receive continued examination and refinement. Among these are:

Instructional

- Clearly written, well articulated objectives made available to students
- Continuous and systematic planning based on feedback and program monitoring
- Attention to individual needs, personal styles of learning, and rates of growth
- Assiduous attention to appropriate "matches" of learners, teachers, methods, and materials
- Greater, more intensive efforts to identify how and under what learning conditions students "transfer" knowledge

Programmatic

- Faculty development in specific awareness, skills, teaching-learning strategies
- Refinement and/or development of diagnostic instruments
- More sophisticated and sensitive research designs
- Comprehensive curricular revisions.

Without a doubt, faculty are a highly significant factor within individual programs. Many faculty, however, fear that their teaching, research, and scholarly skills will be adversely affected by working with these new students (Obler, Francis, and Wishengrad 1977). This concern cannot and should not be minimized or ignored. It requires a delicate balance for faculty to concomitantly develop their teaching styles as well as their more scholarly and professional interests. To focus on one to the exclusion of the other cannot be condoned in higher education institutions. Moreover, the burden of developing teaching styles and searching for more effective ways of relating to "new" students lies heavily on developmental skills faculty (Cross 1971, 1976a; Mulka and Sheerin [1974]; Gordon 1975b; Tuosto and Beitler 1975; FIPSE [1976]; Fishman 1976; Roueche and Snow 1977).

Fantini and Weinstein argued earlier that no teacher without special skills and training can work effectively with the disadvantaged (1968a). Any teacher of remedial skills will attest to the truth of

Shaughnessy's observation that the "new" student teaches them much about training and learning (1977).

As was *reported earlier*, the new student needs to experience a sense of inner control and mastery, in the sense that the student can experience power over his own environment and his own life. Although statistical data cannot be brought to bear on this, impressionist evidence mounts that given clear, attainable goals the student can begin to achieve a sense of mastery by meeting the objectives one by one. The provision for individualized, self-paced learning is an important component of remedial/development programs.

It is well understood that the denigration of oneself as a person and learner further reinforces unsuccessful academic behavior (Creighton 1970). Rotter's behavioral theory when applied to developmental programs has important implications concerning the need for support services, particularly counseling (see Roueche and Snow 1977). Consequently, programs must address the concept of holistic development that embraces the cognitive, affective, and behavioral growth of the individual student.

Greater effort must also be exerted to identify the process by which skills learned in developmental programs are transferred to regular classwork (Fincher 1975; Gordon 1975a; Cross 1976a) as well as to how long students retain specific skills.

Throughout this study specific recommendations have been made in relation to the topic being examined; some general recommendations emerge as well.

- Emphasis should be from a reactive or rehabilitating posture to an active and preventive posture (see Suchman 1967; Mulka and Sheerin [1974]).
- Awareness, study, and research of the educational process itself must be increased (see Lonergan 1957).
- A national center or clearinghouse should be established for the dissemination of tested ideas, models, and alternatives.
- The entire educational structure itself needs to be reexamined and reconstructed in terms of greater accountability and competencies.

Suchman proposes a model of intervening variables that offers a useful basis for the first recommendation of this study. He identifies four components: preconditions, causes, effects, and consequences. Intervention between the preconditions and the causes is primary or preventive; between the effects and the consequences it is tertiary and rehabilitative (1967, p. 173).

Applying this model to developmental skills programs, one may say that current activities are tertiary interventions aimed at "rehabilitat-

ing" the student whose previous education has made him less than adequately prepared for higher education. An active rather than reactive posture would demand that prevention be the primary focus.

Nothing short of massive, intensive efforts to improve the quality of education at all levels can effectively remediate the current situation (Etzioni 1970). This fact, together with the hiatus of reliable research to support innovations, creates genuine tension, frustration, and ambiguity.

Tinto (1974) recommends the development of a clearinghouse for research efforts to reduce the duplication of unsuccessful ideas (see also Ruchkin in Passow 1972, pp. 253-256). This clearinghouse could also serve as a center for disseminating successful procedures; for establishing and monitoring action-research efforts to test new ideas; and for publicizing methods and materials for preservice and in-service faculty development.

One recommendation emerges more strongly from the literature than all others, either explicitly or implicitly: there is a need for a complete overhaul of existing educational structures (Stanley 1970; Bynum 1972; Ruchkin in Passow 1972; Morrison 1973; Gordon 1975). Tinkering with programs while leaving institutions alone may be forgiven once, according to Ruchkin, on the grounds of ignorance, but to repeat this error is irresponsible and unprofessional (in Passow 1972, p. 249).

The ultimate goal of developmental skills programs should be their own self-destruction—on the basis of there being no longer any need for them. That ideal, however, in the final analysis is unrealistic and perhaps the best one can hope for is a continuing search for more effective and efficient developmental programs.

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